# MATH 5332: DIFFERENTIAL EQUATIONS Spring 2024

Section No.: 11150

**Instructor:** Garret J. Etgen

Office No.: 695 PGH

Phone: 713-743-3510

e-mail: etgen@math.uh.edu

### **Prerequisites:**

MATH 5331: Linear Algebra, or consent of instructor

## Course Description:

First order differential equations, linear differential equations, Laplace transformations, systems of linear equations, series solutions. The course will also involve applications of differential equations and some use of "technology," i.e., computer examples and exercises.

#### Content:

- Introduction to Differential Equations
- First order equations and applications
- Linear differential equations and applications
- Laplace transformations
- Systems of linear differential equations
- Series Solutions

## Text:

The text material is posted on Canvas.

## **Assistance:**

There will be weekly Q&A sessions on Teams to answer questions about the course material. While the primary focus will be on the Assignments, there will also be time for more general questions on concepts and techniques. See below for information on the assignments. Immediate help is also available via e-mail.

## **Evaluation:**

Students will be evaluated on:

- 1. Written homework assignments (20%) Homework assignments will be graded and returned.
- 2. Examinations (80%)

There will be two examinations during the semester, one at mid-term and one at the end of the course (see the course calendar for dates). The exams will be weighted equally.

Exam preparation material will be supplied.